Name:

Enrolment No:

UPES

End Semester Examination, December 2024

Course : IPR & Scientific Writing **Semester : VII**

Program : B.Tech-Biotechnology & B.Tech-Food Technology **Duration : 3 Hours**

Course Code: HSCC4002 **Max. Marks: 100**

Instructions: All questions are compulsory.

Please read the questions carefully. The paper contains four sections.

S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q 1	The recipe of Coca-Cola is protected under which IPR?	1.5	CO1
Q 2	Which IPR is Nike's "Just Do it" protected under?	1.5	CO1
Q 3	_____ IPR prevents the works of creators/ artists	1.5	CO1
Q 4	Name any one part of a patent.	1.5	CO1
Q 5	How long is a patent protected? a. 20 years b. The life of the author plus 20 years c. 60 years d. The life of the author plus 60 years	1.5	CO1
Q 6	In which two years were major amendments made to the Indian Patent law?	1.5	CO1
Q 7	Berne convention was established to protect _____	1.5	CO1
Q 8	Name any patent search database.	1.5	CO1
Q 9	Marrakesh agreement led to the establishment of which organization?	1.5	CO1
Q 10	Which IP can Manipuri Tarkashi be protected under?	1.5	CO1
Q 11	Name one software that can be used to check for plagiarism.	1.5	CO1
Q 12	Which of the following is an adulterant added to coffee powder? a. Water and starch powder b. Artificial coloring agents c. Dyes, chemicals, and Lead Chromate d. Chicory, tamarind seeds powder	1.5	CO1
Q 13	Adulteration occurs at what point in the process? a. Producer b. Distributor c. Retailer d. All of the above	1.5	CO1
Q 14	Tree bark can be used to adulterate a. Asafoetida b. Fennel seeds	1.5	CO1

	c. Black pepper d. Cinnamon		
Q 15	HACCP stands for a. Physical, Chemical, and Biological hazards b. Accurately monitoring food hygiene hazards c. Identifying CCPs, including procedure, location, and process d. A systematic analysis of all steps and regular monitoring of control points	1.5	CO1
Q 16	Is the statement True or False: "One should not promote and foster a research culture and environment that supports the responsible conduct of research"	1.5	CO2
Q 17	Is the statement True or False: "A researcher should respect research participants, the wider community, animals, and the environment."	1.5	CO2
Q 18	Is the statement True or False: "A researcher should be transparent in communicating results of a research study"	1.5	CO2
Q 19	The addition of adulterants _____ a. increases quality of food b. Increases nutritional value of food c. reduces the total quality of food d. All of the above	1.5	CO2
Q 20	Is the following statement True or False: "Mentor-trainee should be transparent about how the trainee's contributions will be acknowledged"	1.5	CO2
Section B (4Qx5M=20 Marks)			
Q 21	Write the full form of the following **(1 mark each)** a. USPTO b. TRIPS c. WIPO d. IP e. GI	5	CO1
Q 22	a. Define patent. **(2 marks)** b. Describe any three parts of a patent briefly. **(1*3 = 3 marks)**	5	CO2
Q 23	Describe what these orders/bodies regulate **(1*5 = 5 marks)** a. Prevention of Food Adulteration (PFA) Act b. The Edible Oils Packaging (Regulation) Order c. FSSAI d. Food Safety and Standards Regulations e. The Solvent Extracted Oil, De-Oiled Meal and Edible Flour (Control) Order	5	CO2
Q 24	Define plagiarism. **(2 marks)** Briefly describe any three types of plagiarism with examples. **(1*3 = 3 marks)**	5	CO2
Section C (2Qx15M=30 Marks)			
Q 25	a. Define food adulteration. **(2 marks)**	15	CO3

<table>
<tr><td></td><td>b. You purchased red chili powder from the market and suspected it had been adulterated. Discuss what you observed in red chili powder that you thought was adulterated. (4 marks)
c. Use any significant international incident involving food adulteration to demonstrate how it can lead to casualties. (5 marks)
d. You have a milk factory. Your business has not been working great. You have decided to adulterate the milk. Demonstrate what combination of adulterants you will use and how they will help deceive the consumers. (4 marks)</td><td></td><td></td></tr>
<tr><td>Q 26</td><td>You manage a laboratory team on a high-priority research project involving complex experimental procedures and specialized instruments.
Interpret and describe your responsibilities as a mentor and how you will handle the following situations:
a. One of your new laboratory staff members is unfamiliar with the experimental procedures and instrumentation central to the project. (3 marks)
b. During the project, you discover that some instruments may not have undergone routine calibration and maintenance as required. (3 marks)
c. You observe that some team members are not consistently following the established format for recording experimental data. (3 marks)
d. The statistical methods used to analyze the data are poorly documented in the lab’s records. (2 marks)
e. Some data points were excluded from the analysis, but the reason for this decision is unclear and has not been reported. (2 marks)
f. Given the complexity of the data and the statistical analysis involved, you realize that some of the methods might be outside the team's expertise. (2 marks)</td><td>15</td><td>CO4</td></tr>
<tr><td colspan="4">Section D
(2Qx10M=20 Marks)</td></tr>
<tr><td>Q 27</td><td>Dr. X is a faculty, and their research profile is shared below
<table>
<tr><th>S.no</th><th>Name of paper</th><th>Number of Citations</th></tr>
<tr><td>1.</td><td>Research Paper 1</td><td>133</td></tr>
<tr><td>2.</td><td>Research Paper 2</td><td>79</td></tr>
<tr><td>3.</td><td>Research Paper 3</td><td>52</td></tr>
<tr><td>4.</td><td>Research Paper 4</td><td>34</td></tr>
<tr><td>5.</td><td>Research Paper 5</td><td>28</td></tr>
<tr><td>6.</td><td>Research Paper 6</td><td>7</td></tr>
<tr><td>7.</td><td>Research Paper 7</td><td>27</td></tr>
<tr><td>8</td><td>Research Paper 8</td><td>6</td></tr>
<tr><td>9.</td><td>Research Paper 9</td><td>5</td></tr>
<tr><td>10.</td><td>Research Paper 10</td><td>0</td></tr>
</table>
a. Define citations. Calculate the total number of citations of Dr. X (1+2 = 3 marks)
b. Define i-10 index. Calculate the i-10 index for Dr. X (1+2 = 3 marks)
c. Define h-index. Calculate the h-index for Dr. X (1+2 = 3 marks)</td><td>10</td><td>CO3</td></tr>
</table>

	d. What is the maximum number of citations in a research paper published by Dr. X **(1 mark)**		
Q 28	Examine how each of the following can help India become the technological capital of the world. **(2*5 = 10 marks)** a. GI b. Industrial Design c. Trade secret d. Traditional knowledge e. Patents	10	CO4